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12	UNITED STATES DISTRICT COURT		
13	NORTHERN DISTRICT OF CALIFORNIA		
14	SAN FRANCISCO DIVISION		
15		(classed B1 vibio) v	
16	UNITED STATES OF AMERICA,) CASE NO. CR. 20-00249 RS	
17	Plaintiff,) UNITED STATES' NOTICE OF EXPERT) TESTIMONY BY FBI FORENSIC ACCOUNTANT	
18	v.) BRANDON TABBAL)	
19	ROWLAND MARCUS ANDRADE,) Trial Date; February 10, 2025	
20	Defendant.	Court: Hon. Richard Seeborg, Courtroom 3, 17 th Fl.	
21		,	
22	The United States hereby discloses, pursuant to Federal Rule of Criminal Procedure 16(a)(1)(G)		
23	and Federal Rule of Evidence 702, that it may proffer FBI Forensic Accountant Brandon Tabbal as an		
24	expert witness at trial.		
25	Mr. Tabbal's testimony will be based on his experience, education, and training, which render		
26	him an expert regarding cryptocurrency. His CV has been provided to defense counsel. In sum, Mr.		
27	Tabbal is a Certified Public Accountant, and he is currently employed as a Forensic Accountant by the		
28	FBI, where he is assigned to the FBI Virtual Assets Unit. Mr. Tabbal has been employed by the FBI		
	NOTICE OF EXPERT TEST. BY B. TABBAL 20-CR-249 RS	1	

since February 2016, he has been a member of the FBI's Virtual Currency Response Team since 2020, and he has been a member of the FBI Virtual Assets Unit since July 2022. He serves as an FBI blockchain analysis expert and provides analytical support and technical expertise to the FBI and U.S. Department of Justice on investigations and prosecutions involving cryptocurrency and money laundering involving the use of cryptocurrency. Further, Mr. Tabbal has supported a broad variety of cases involving the illicit use of cryptocurrency, including investigations of child sexual abuse material, ransomware, darknet market activity, exchange exploits, frauds, hitmen for hire schemes, and computer intrusions. Mr. Tabbal has developed and delivered training curriculum on cryptocurrency topics to FBI field offices, local law enforcement, federal government agencies, international law enforcement, U.S. Department of Justice, and the private sector. Mr. Tabbal has not previously testified at trial as an expert witness. He testified as a lay witness at trial in *United States v. Ayala*, 16-cr-00495 HZ (D. Or.).

As described in detail in his CV, during the past five years, Mr. Tabbal has served as a speaker and trainer at numerous trainings and conferences involving cryptocurrency. And he has attended numerous trainings in the past five years involving cryptocurrency and cryptocurrency-based money laundering. Mr. Tabbal is also an FBI trainer in the area of blockchain analysis. In this role he has designed and led "hackathons" that were used to train the FBI's cryptocurrency teams to follow cryptocurrency through different money laundering mechanisms such as blockchain hopping and decentralized exchanges. Further, Mr. Tabbal has provided trainings that explain the following:

- o what cryptocurrency is;
- o addresses, wallets, public keys, and private keys, as they relate to cryptocurrency;
- o how to execute seizures of cryptocurrency;
- o how to follow and trace cryptocurrency transactions;
- o how to assess behavior of a cryptocurrency wallet;
- o how to identify if a wallet is used for the sale of child sexual abuse material (child pornography);
- o how to freeze illicit funds;
- o how to explain cryptocurrency in search warrant affidavits; and
- o how money laundering techniques have evolved over time.

At trial, Mr. Tabbal will explain that cryptocurrency is a type of digital asset circulated over the Internet as substitutes for traditional fiat currency. Cryptocurrency can exist digitally on the Internet, in an electronic storage device, or in cloud-based servers. Virtual currencies are not issued by any

government or bank like traditional fiat currencies, such as the U.S. dollar, but rather are generated and 1 2 controlled through computer software. He will further explain that there are several thousand 3 cryptocurrencies in circulation, of which Bitcoin is the best known. He will explain that some of the more well-known cryptocurrencies, such as Bitcoin, utilize a "blockchain" to account for transactions 5 using the currency. Cryptocurrency is decentralized and peer-to-peer network-based. This means that typically no single person or entity has control. Rather, all users of a cryptocurrency retain collective 6 7 control, and users may exchange cryptocurrency between themselves directly without the involvement 8 of a central authority. Cryptocurrency is often generated and controlled through computer software operating via a decentralized network, meaning that typically no central authority exerts control over the 10 monetary function of the cryptocurrency. To acquire cryptocurrency, a typical user will seek the services of a cryptocurrency "exchange." Cryptocurrency exchanges typically accept payments of fiat 11 currency² or other convertible virtual currency to obtain the cryptocurrency. Users may also accept 12 13 cryptocurrency as payment for goods or services, and may attempt to "mine" cryptocurrencies, which occurs when users utilize their computers' computing power to verify transactions on the blockchain. 14 This decentralized verification system takes the place of a central authority, like a bank, in processing 15 16 transactions dealing in cryptocurrencies.

Mr. Tabbal will explain that to sell or exchange cryptocurrency, the sender of the cryptocurrency generally sends the prescribed amount of currency to the recipient's cryptocurrency "address." An address is designated by a complex string of letters and numbers, in a similar fashion as bank account numbers at traditional banks. The recipient can then conduct transactions with other cryptocurrency users.

Mr. Tabbal will explain that the cryptocurrency industry operates like other technology startups. Developers market and launch virtual currencies to meet a variety of needs and compete with one

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¹ Bitcoin is one among many cryptocurrencies. For ease of reference, the terms used herein generally relate to Bitcoin as the cryptocurrency described below appears to mirror the terms used in Bitcoin parlance.

² "Fiat" currency refers to a currency whose value derives from law or government regulation and is thus "backed" by the government in question, such as the U.S. Dollar or the Euro.

another for users and funding. Developers meet these needs by embedding currencies with various utilitarian functions. With respect to the funding process, developers commonly raise capital to support their projects from individual investors through a process called initial coin offering (hereinafter "ICO"), which is similar in certain respects to the initial public offering ("IPO") process for large corporations. Developers create awareness of their project by, among other things, producing marketing material; identifying special niches into which their proposed virtual currency fits; and participating in online forums and discussions dedicated to cryptocurrency.

Mr. Tabbal will explain the term "token" as it relates to cryptocurrency. He will explain that to raise funding, cryptocurrency developers often sell "tokens," which are digital representations of an asset. Tokens typically are units created on top of existing blockchains such as Ethereum. Tokens can typically be held, traded, or sold for other assets which are usually other cryptocurrencies or fiat currencies. While not typical an actual cryptocurrency could be referred to as a "token" because the developer is developing a new cryptocurrency and seeks to transfer the "token" holders to the new cryptocurrency once it is launched. This is sometimes referred to as token migrations where the initial tokens act as placeholder tokens, which are considered temporary until the project is fully developed and launched. Once launch occurs the placeholder tokens typically can be exchanged for the final token.

Mr. Tabbal will explain that individuals and groups seeking funding and exposure of their various cryptocurrency projects typically produce "white papers" in advance of or in conjunction with the cryptocurrency's ICO. A white paper explains the utility of a cryptocurrency; its features; its projected valuation; and its differences from other cryptocurrencies.

Mr. Tabbal will explain the term "blockchain" as it relates to cryptocurrency, and he will explain a cryptocurrency "wallet" and how it functions. Mr. Tabbal will also explain how a "cryptocurrency exchange" functions, and he will describe its purpose.

1	1 Mr. Tabbal will use a demonstrative PowerPoint pr	esentation to assist in explaining the cryptocurrency
2	2 concepts discuss herein above. The government ha	s provided a copy of the demonstrative to defense
3	3 counsel.	
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5	5 Pursuant to Federal Rule of Criminal Proceed	dure 16(a)(1)(G)(v), I approve this disclosure of my
6	6 expected testimony.	
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8	8	<u>/s/ Brandon Tabbal</u> Brandon Tabbal
9	9	Forensic Accountant FBI
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4	DATED: December 23, 2024	Respectfully submitted,
5	5	ISMAIL J. RAMSEY
6	6	United States Attorney
7	7	/s/
8	8	CHRISTIAAN HIGHSMITH
9	9	DAVID WARD Assistant United States Attorneys
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21		MATTHEW CHOU Special Assistant United States Attorney
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